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NEWS FROM THE LINNEAN SOCIETY OF LONDON - A FORUM FOR NATURAL HISTORY

## Sir James Edward Smith: ONLINE AND OVER TO YOU

fter more than three years of careful research, cataloguing, cleaning, repairing, photographing and re-housing, we are pleased to announce that the Correspondence of Sir James Edward Smith is now available online. You've read about it in PuLSe. You've seen the blurbs on the website. And now, finally, you can look at any letter written to or by Sir James Edward Smith held at the Linnean Society safely from the comfort of your own home. More than 3,500 letters of great historical and scientific importance are available and waiting to be examined.

It all started in late 2010: the Linnean Society received a generous grant from the Andrew W Mellon Foundation to catalogue, conserve and digitise the entire correspondence collection of the Linnean Society's founder, Sir James Edward Smith (1759-1828). The collection includes the scientific and personal correspondence of Smith and provides great insight into both the botanical community and society as a whole during the late 18th and early 19th centuries. Correspondents of note include Sir Joseph Banks, William Roscoe, Robert Brown, Sir William Jackson Hooker, Elizabeth Fry, Sir Humphry Davy and Antoine Laurent de Jussieu.

The cataloguing of this valuable collection was undertaken by our very thorough and knowledgeable Cataloguing Archivist, Tom Kennett (currently writing Smith's biography, so make space on your bookshelves). Tom's detailed descriptions and research notes are also available with images, the added metadata allowing for seamless analysis of the text. The entire collection was cleaned,

repaired, and re-housed by our current Project Conservator,
Helen Cowdy, and former project conservators, Lucy Gosnay and
Samantha Taylor. The digitisation was carried out by our Digitisation
Officer, Andrea Deneau, using an Atiz BookDrive Pro scanner. The scanner, which was also purchased with Mellon Foundation funding, has proved invaluable in enhancing our online collections with other projects such as the Linnaean Annotated Library and the Linnaean Manuscripts.

We encourage you to have a look for yourself at the Smith correspondence collection at linnean-online.org/smith\_correspondence.html—feel welcome to share any insights you have; the Society is always keen to learn more. And while you're there, it's the perfect opportunity to reacquaint yourself with our other online collections, including our specimens, herbaria, Wallace notebooks, Buchanan-Hamilton drawings and Linnaean correspondence.

Not sure where to start with your online browsing? Here are a few highlights in the collection...

- ❖ A letter from Samuel
  Goodenough describing the
  King's derangement and the need
  for a Regency, sent 18 February
- A letter by John Bradbury sent from the heart of the Mahas, or Ohama Nation, Missouri, in 1811.
- A letter by Robert Brown, listing the various misfortunes that befell Matthew Flinders' third voyage to Australia, sent 12 January 1806.



Andrea Deneau
(Digitisation Officer)
and Tom Kennett
(Archivist and Smith Biographer)
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ABOVE **Sir James Edward Smith**© The Linnean
Society of London



etween 13–15 June, a team from the Linnean Society took part in the Bristol Festival of Nature. Simon Hiscock FLS of the University of Bristol Botanic Garden (www. bristol.ac.uk/botanic-garden) generously offered a shared stand at the event, where Society team members Hazel Leeper, Mair Shepherd and Elizabeth Rollinson showcased the Society's education resources and highlighted the importance of taxonomy and the Linnaean legacy.

The opening day was reserved for students from local primary schools, who were able to study several plant specimens, and learn about Linnaeus' naming system and the relationships between plants within different genera. For example, the students were happy to agree that lemongrass and wheat were related, but the groups were split when it came to the pelargoniums and true geraniums. The groups were very confident that the cactus and succulent on display were related, but were surprised to learn that, with the succulent from Africa and the cactus from South America, their similar characteristics were an example of convergent evolution.

Though the final group of plants looked nothing alike, including a Banksia serrata and a lotus (*Nelumbo*), the pupils were shown how some organisms are being re-classified as we find out more about their genetic structure and discover that they are, in fact, related. The lotus proved particularly engaging; the simple act of allowing the students to gently flick water at the specimen demonstrated the hydrophobic properties of its leaves. They were even more impressed when even superglue was rendered 'unstickable' by the lotus leaves.

Every group visiting the stand took part in a short activity in which they identified plants based on their appearance, using a table of Latin or Greek roots to match to each specimen's scientific name. Teachers were then given a pack of the Society's education resources and contact details to take with them. The team found it very rewarding introducing the young students to Linnaeus and the science of classification, specifically when children who had arrived at the stand with no interest in plants were heard to say upon leaving that they "liked plants now"!

For the final two days of the festival the tent was open to the public, creating a much more informal atmosphere, with the University of Bristol tent attracting approximately 4,000 visitors. There was a wide range of visitors to the stand, from undergraduates to amateur gardeners to families with young children, and we even welcomed a few Fellows of the Linnean Society.

Mair Shepherd Education Resources Design Coordinator mair@linnean.org BELOW The hydrophobic qualities of the lotus leaf Wikimedia Commons/H. 7ell

BELOW Young students
learn about Latin
names at the Festival
© University of Bristol



#### THE LIFE SCIENTIFIC: Dr Sandy Knapp FLS

oin BBC Radio 4 presenter Professor Jim Al-Khalili as he interviews Dr Sandy Knapp FLS for his programme *The Life Scientific*. Hear how, surrounded by a "sea of physicists" in Los Alamos, New Mexico, Sandy was drawn to biology and began to study botany after a marine biology course at Pomona College, California, proved to be full. With her research in Solanaceae leading to many years collecting thousands of plant specimens in South America, Sandy is now considered the world expert on this large and economically important plant family. When not travelling around the globe on either research, lecturing or public engagement trips, Sandy is based at the Natural History Museum, London, where she is Head of the Plants Division.

Of her time collecting with Sandy, Dr Tiina Särkinnen of the Royal Botanic Garden Edinburgh reveals: "It is a truly amazing experience. She might have had a stomach bug for a week and not eaten but she will just push on through. She was the first one in the car waiting to be heading off to the field, and the first one out of the car (once we've stopped it) collecting manically all over the place. And she's a real natural historian, she will observe different 'freaks' in nature, so, many biological discoveries are often based on observing something that isn't along the norm and she really has the eyes for that."

www.bbc.co.uk/programmes/b0477pgv





# The RHS 17th European Orchid Show and Conference

#### London 8-12 April 2015

he Linnean Society is proud to be supporting the Royal Horticultural Society (RHS) and their show dedicated to orchid species. Taking place early next year at the RHS Lindley Hall, Vincent Square location in central London, the event promises a plethora of orchid information, from displays from orchid growers and traders to unusual species on show. The conference will be based across two sites, with talks on hybridisation and hardy species at RHS Lindley Hall, and lectures spanning pollination biology and orchid conservation at the Royal Botanic Gardens, Kew.

To find out more visit www.rhs.org.uk/shows-events/rhs-london-shows/european-orchid-show-and-conference-2015.

## The Journals of the Linnean Society

adly, based on economic grounds, it has been decided that hard copies of the Society's three key Journals will no longer be available for distribution to Fellows, from May 2015. For those Fellows who pay either £70 for the Biological Journal of the Linnean Society or £55 for the Botanical Journal or Zoological Journal, I would remind them that for just £20 they can acquire all three journals online at Wiley.com, with the added bonus of having instant access to all of the back issues. This online subscription will also enable Fellows to read all three Journals via the Journal Apps launching this summer. There is, however, some very good news for all Fellows that I hope will offset any disappointment-our publishers, Wiley, are offering a 35% discount to Fellows on most print books on Wiley.com.

Fellows must log in to our secure Fellows' area to take advantage of this offer:

To log in to the Fellows' area and explore go to linnean.org/fellows/secure-fellows-area. Once there, click the Wiley Discount tab on the left.

Once in the Wiley Discount page, Fellows will see a link to the Wiley online shop and a membership code. To save, enter the membership code in the promotion code field in the Wiley.com shopping cart and click the Apply Discount button.

Professor Gren Lucas, Treasurer



## Introducing the Linnean Society Journal Apps

ccess Linnean Society journal content wherever you are! The new journal Apps, launching in August, have been developed for readers who like to browse issues online. During the research stage, feedback showed that readers wanted Apps that access a journal's full content, not just abstracts, so Wiley Blackwell has developed and tailored these Apps to readers' needs. The Apps are accessible via iPhone, iPad and iPod touch.

#### How much does it cost to use?

It will be FREE to install the Apps themselves. Those with a subscription will be able to access content through the Apps, those without will be able to access abstracts and a free sample issue, available along with some full content.

#### Where do I find the App?

The journal Apps will be available in the App Store, using the iOS Newsstand, or via links on Wiley.com.

#### Is it available for Android?

Currently the Apps have been developed for Apple products, but Wiley intends to cater for Android users in the future.

#### What do the Apps offer?

- ❖ Stay current with the latest articles through Early View
- ❖ Be alerted when a new monthly issue is available
- ❖ Download articles and issues for offline perusal
- Save your favourite articles for quick and easy access
- ♣ Share articles with your peers

Find out more by visiting www.wileyonlinelibrary.com/go/LinneanApp

#### Want to know more about apps in general?

Go to www.linnean.org/journals and download our Guide to Apps.





n the last issue of *PuLSe*, Dr David Hone emphatically highlighted the issues facing taxonomy and the many misconceptions surrounding this discipline, particularly that it does not involve cutting-edge science, or that what taxonomists practise is considered 'old science'. As David showed, nothing could be further from the truth–taxonomy completely embraces the most modern molecular and bioinformatics technologies, which are facilitating discoveries of unknown biodiversity (especially in the micro-world) at remarkable scale and speed. In addition, cybertaxonomy is expanding exponentially as online digital technologies flourish. In short, taxonomy is vital to 21st-century science.

However, despite this, cuts in the funding of basic taxonomic research continue, as illustrated currently in the UK at the Royal Botanic Gardens, Kew (RBG Kew) with a loss of 70 scientists, and the National Museum of Wales (NMW) with 30% cuts, a loss of 12 taxonomists—cuts in science are being made in favour of heritage/public outreach. Part of the problem is that there is no coherent funding approach for 'multipurpose' institutions such as RBG Kew and RBG Edinburgh, the Natural History Museum (NHM) and NMW, where much basic taxonomic research has always been undertaken; different UK government departments (DEFRA, DCMS, BIS, RCUK, etc.) fund different institutions. Basic science is not protected in 'multipurpose' institutions, while, ironically, the government claims it is ring-fencing science (which may be so in universities and RCUK funded institutes).

No-one disputes that taxonomy provides the critical information underpinning many economically important areas, from forensics to conservation, biodiversity to sustainability, understanding ecosystem services to predicting the impact of climate change (accurate identification is vital for baselines when measuring these changes). Taxonomists are central to the provision of this information—the UK needs a national capability in Taxonomy & Systematics (T&S), not least to deliver on its obligations under the Convention on Biological Diversity (CBD) and the Convention on International Trade in Endangered Species (CITES), but further, to identify invasive species.

So, what has the Linnean Society, as the proud guardian of the collections of Linnaeus, 'Father of Taxonomy', been doing to reinforce backing for this discipline? The Society has been active in an advisory capacity, in advocacy and in administering grant funding for taxonomy.

#### **HISTORY**

Let's take a step back. There have been three reviews on T&S by the House of Lords Select Committee on Science & Technology (HoLSCS&T)-in 1991, 2001 and 2007. The conclusion was that more needed to be done to ensure the future health of the discipline; that more effective dialogue between the users and producers of taxonomy should be promoted. Emphasis was placed on stimulating recruitment, alongside the integration of environmental and biodiversity issues into school curricula, while reaping the benefits of the burgeoning fields of molecular taxonomy, bioinformatics and the potential of web-based cybertaxonomy. The HoLSCS&T believed that the fragmentation of responsibility for T&S within the Government was part of the problem, and so recommended that a lead Department be designated (BIS equivalent).

Pursuant to the HoLSCS&T review, the Linnean Society launched a consultation in 2009 (published 2010) related to succession planning in T&S, identifying the priorities: vulnerable taxonomic groups and ecosystems, legislation, training, and collections/documentation. What has been highlighted, however, is a lack of succession planning, with erosion in part due to age, death and non-replacement of current taxonomists who are key to UK, and, in some cases, international interests.

In parallel, NERC contracted an independent group in 2009 to undertake a review of the state of T&S in the UK and develop a national strategy; this group issued two reports in June 2011 with some 19 recommendations. Coordinated by the Linnean Society, the taxonomy community responded in early 2012, and in November 2012 NERC identified and published five 'priority areas': grand challenges, collections, digitisation, roadmap for ID tools and training.



#### **PROGRESS**

Yet, what is needed is real action. In the short-term, the Co-Syst and SYNTAX funds, awarded for preliminary research with a substantial taxonomic component, have been provided variously by NERC, DEFRA & BBSRC jointly (£250,000 per year in 2010–12), and administered by the Linnean Society. These grants of £5,000–£30,000 to around 12 researchers each year were intended to stimulate funding of further T&S projects. The third year of SYNTAX grants was completed during 2013 and the Linnean Society is currently evaluating the outcomes of this scheme to ascertain if its objectives were achieved.

Another positive step is the nascent *Taxonomy Co-ordination Committee* (TCC, comprising the five T&S organisations: NHM, RBG Kew, RBG Edinburgh, NMW, the Linnean Society) led by the NHM, and the *NHM National Programme* which incorporates the *UK Natural Science Consortium*: 17 museums, RBG Kew, RBG Edinburgh, Arts Council England, Natural Sciences Collections Association (NatSCA) and the Linnean Society. The Programme focuses on collaborative advocacy projects, addressing how organisations can work together to support the use and care of natural history collections.

Nature Data (creating a UK Collections Information System) is a joint NHM/NatSCA initiative being piloted as Natural History Near You (www.natsca.org/NHNearYou), led by Paolo Viscardi at the Horniman Museum. Additionally, the Scratchpad initiative, led by Cybertaxonomist Vince Smith at the NHM, enables researchers to share and manage biodiversity data globally online. Find out more about the initiative by visiting http://www.nhm.ac.uk/about-us/news/2009/november/social-network-tool-for-natural-history-science48050.html.

And how best to invest in taxonomists of the future? With a view to inciting a strong interest in taxonomy from a young age, the new UK Primary level curriculum, active from Sept 2014, namechecks Carl Linnaeus, a hugely positive step forward (in part through the efforts of the Linnean Society in National Curriculum consultations).

An MSc course in Fungal & Plant Taxonomy (with an intake of 30 students per year) is being instigated at RBG Kew in 2015, in collaboration with Queen Mary University of London. DEFRA is investing £400,000 per year over a five year period in the volunteer/recording community, focused on monitoring wildlife and invasive species. Although not providing a leading role for taxonomic science, this initiative was vital for the government to meet its international obligations under various conventions. Volunteer input is to be applauded, but it must also be recognised that volunteers need taxonomists to support them, and taxonomists in the later stages of their careers are often in operational roles and not best placed to pass on their skills.





ABOVE LEFT Do some governing bodies see taxonomy as an 'old science'?

© Stocksnapper 2014, Shutterstock.com

TOP Cuts in funding for basic taxonomic research will affect RGB Kew and other multipurpose institutions

ABOVE The NHM/NatSCA led initiative that aims to hold collections information in one place

LEFT Only 10% of Earth's living species have been identified by taxonomists so far–taxonomy is vital to 21st-century science © Hendrick Martens 2014, Shutterstock.com

Find out more about our 11 Sept Taxonomy & Systematics Plenary Meeting 'Who Needs Taxonomists?' at: www.linnean.org/whoneedstaxonomists

#### **FUTURE**

There is much more to do-even by the best estimates, taxonomists have identified perhaps 10% of living species on Earth. The scientific community must not only secure taxonomists for the future, but ensure funding for their research. As such, the Linnean Society will seek to re-instate the SYNTAX fund and push for rina-fencing of wider funding in T&S research. Efforts will also continue to reinforce the T&S component of all curricula. The aim is to engage the emerging cadres of students produced by genomics, bioinformatics, computer science, conservation and ecological training schemes with the major challenges and opportunities of taxonomy, while retaining taxon-based expertise.

Working in collaboration with our T&S partner institutions, through the TCC, the Society will also seek to achieve better integration of collections, biodiversity informatics provision and research capability, underlining the huge potential of cybertaxonomy.

For their part, taxonomists need to be better prepared to engage fully with the science community involved in funding decisions, articulating their value, demonstrating to the government and other funding bodies that their research endeavours are sustainable, with tangible outputs. Value propositions need to be highlighted, and an idea of return on investment is essential for successful grant applications. With major competition for research funding, taxonomists must enhance their visibility and propose innovative, commercially aware projects with appropriate metrics to demonstrate the impact of their research and its benefits to society, or risk the extinction of the science itself, which would be to the immeasurable detriment of the future understanding and conservation of biodiversity on Earth.

> Dr Elizabeth Rollinson Executive Secretary elizabeth@linnean.org

#### **GUIDE TO ACRONYMS**

**RBG Kew** Royal Botanic Gardens, Kew

RBG Edinburgh Royal Botanic Garden, Edinburgh

NHM Natural History Museum, London

NMW National Museum of Wales

DEFRA
Department for Environment,
Food & Rural Affairs

DCMS
Department for Culture,
Media & Sport

BIS
Department for Business,
Innovation & Skills

Research Councils UK

HoLSCS&T House of Lords Select Committee on Science & Technology

NERC Natural Environment Research Council

BBSRC Biotechnology and Biological Sciences Research Council

Natural Sciences Collections
Association

# The Linnaean Manuscript Project

ny Fellows who attended this year's Conversazione at Burlington House will have seen some of the interesting Linnaean manuscript materials on display, including the model of a bandage for a broken leg, possibly dating from the medical lectures Linnaeus took in the early 1730s at Uppsala University. The text inside it, in Linnaeus' hand, reads: Usus in osse fracto adeo ut perforet crus—'For use in a bone fractured to such a degree that the leg has been pierced!'

The Linnaean Manuscript Project is currently underway—it is the fourth major conservation and digitisation programme undertaken by the Linnean Society to be fully funded through the generosity of the Andrew W Mellon Foundation. It is a complex project with many logistical hurdles to incorporate, including the old sequencing of some of the contents, material types and even size variation, with regard to digitisation.

Dr Isabelle Charmantier is creating the catalogue. To put it in context, the Linnaean manuscripts were partly catalogued by Professor AH Uggla in the 1930s, which remained unpublished due to illness and the onset of the Second World War. His catalogue divided the manuscripts into three major sub-fonds (a fond being a collection of materials from a specific creator): 1) manuscripts from Linnaeus Pater; 2) manuscripts

from Linnaeus Filius; 3) what Uggla called 'Miscellaneous Authors', that is, manuscripts sent to Linnaeus by various naturalists, collectors and scholars. These three sub-fonds have been kept, as well as most of the thematic series which were set up by Uggla to organise the manuscripts. In addition to these three sub-fonds Dr Charmantier has created another entitled 'Collection history', which will incorporate all the Linnaean, JE Smith, and Uggla wrappers which held the manuscripts, and often contain valuable information on the provenance and identity of the manuscripts.

Within both the Linnaeus Pater and Linnaeus Filius manuscripts, however, Uggla had categories entitled 'Varia', including manuscripts of various content, and 'Dubia', containing items not catalogued by Uggla. The current catalogue has tried as far as possible to attribute each manuscript to a meaningful series. Identifying the date and content of these manuscripts has so far been the most time-consuming task.

Currently, the Linnaean Manuscripts
Project Team have catalogued and
digitised approximately 13 boxes of
material, with conservation in progress.
The project team consists of Isabelle
Charmantier (Cataloguing), Andrea
Deneau (Digitisation), Janet Ashdown,
Helen Cowdy, Naomi Mitamura and
Tony Bish (Conservation).

of London





## DID YOU KNOW...?

t the back of the Royal Academy of Arts visitors can find the likenesses of many famous faces. What is known as '6 Burlington Gardens' was home to the University of London until 1900, but now houses part of the Royal Academy. Of Palladian architecture and designed in 1866-7 by Sir James Pennethorne, there are 22 statues decorating the building's façade. Yet it is the building's first storey that interests us most, being home to an array of commemorated figures, namely, Gottfried Wilhelm Leibniz (German mathematician and philosopher), Adam Smith (Scottish pioneer of political economics), Georges Cuvier (French naturalist and zoologist), John Locke (English physician and philosopher), Francis Bacon (philosopher and proponent of the scientific revolution) and our own Carl Linnaeus. All created in the 1870s, the six statues are split equally between two sculptors, with Leibniz, Smith and Cuvier sculpted by Patrick MacDowell, and Locke, Bacon and Linnaeus by William Theede. Patrick MacDowell was the son of a Belfast tradesman, whose interest in art was spurred on by support from John Constable-MacDowell went on to study and then exhibit at the Royal Academy. William Theede followed his father into sculpture but was also renowned for his portraits. Interestingly, both artists are linked by Queen Victoria's Prince Albert; MacDowell created Europe, one of the four great groups surrounding the Albert Memorial in South Kensington, London, and Theede, a Royal favourite, was appointed by Queen Victoria to take the death mask of her late husband, for use in the creation of several Albert statues.

But what of our Linnaeus? His figure stands next to Cuvier, and was commemorated for not only his contributions to science and natural history but for being an "illustrious foreigner".

The façade is undergoing a sample clean to rid it of the London grime, choosing Linnaeus to study the outcome. The full façade is due to be cleaned in 2015–16 and we can't wait to see the results.

## LINNAEUS "A megastar forever"

or those not in the know, Carl Linnaeus was recently judged the most influential person on Wikipedia. Using a Google algorithm, Linnaeus came out in the results above Barack Obama, and even Jesus. Read more about it in New Scientist here: http://www.newscientist.com/article/dn25703-jesus-and-hitler-beaten-in-wikipedia-influence-list.html and The Guardian here: http://www.theguardian.com/commentisfree/2014/jun/13/wikipedia-influence-list-carl-linnaeus

# Tonight, live and at the Linnean Society...

innean Society Fellow Pat Morris came upon a number of clippin gs about an albino frog specimen found in Wiltshire in the West of England. Dating from the time when Fellows would bring objects and specimens to meetings for display and discussion, the albino frog was brought in by Rowland Ward in about 1891. Rowland Ward (1848–1912) was a leading London naturalist and taxidermist whose business specialised in big game trophies. His shop was based very close to the Linnean Society at 166 Piccadilly in London's West End, and Ward went on to become a Fellow of the Zoological Society of London (which for a very brief period held its scientific meetings in the rooms at the Linnean Society).

The text from the one of the clippings reads:

#### An Albino Frog

The accompanying illustration represents an albino frog belonging to Mr Rowland Ward, which was exhibited at the meeting of the Linnean Society, held on Thursday, February 5th [ca. 1891]. It is a full-sized male specimen of the common frog, Rana temporaria, being three inches from the tip of the nose to the end of the body, and in very good condition indeed. The animal, generally speaking, is milky-white, but with a pink tinge, owing to the red blood showing through the integument, but the hind legs often appear perfectly pink above the knees. Beneath, and especially on the sides of the body, there is a bluish look. The inner side of the prominence containing the eye is also of a darker hue. The eyes of this frog are perhaps the most remarkable part of it. An ordinary frog has a large circular iris containing brown or golden pigment or colouring matter, while the pupil is large and elliptical, appearing almost, if not quite black, owing to the absorption of the light rays by the pigmented retina. In Albino human beings, white mice



Image courtesy Pai Morris

and white rabbits, the iris and pupil are both pink, for there is no pigment in the iris or retina, which consequently reflect pink light from the unobscured blood. The iris, however, of the Albino frog retains the dark and golden pigment, making the eyes very conspicuous by contrast with the white head and body. The pupil is a lovely deep red when seen with the light shining on it, so that the eyes may be well described as carbuncles in a golden setting. Altogether the animal is most striking, and at the same time very handsome. The specimen under consideration was found last September, in Wiltshire, during the mowing of a barley-field, and has lived in captivity since. It is on view at Mr. Rowland Ward's shop in Piccadilly, which is nearly opposite Bond Street.

## 'We extend our fame by our deeds' LINNAEUS'S COAT-OF-ARMS (C. 1762)

n 1761 (ante-dated 1757), Carl Linnaeus was ennobled, taking the name von Linné. In the months following, Linnaeus himself designed his coat-of-arms, which you can see here—this is Linnaeus's first draft.

Breaking the crest down, the escutcheon is divided into three fields: red (animal), green (vegetable) and black (mineral). In the middle is an egg, coloured silver and the yolk 'anatomised' with red detail, depicting the 'point of growth'. At the top of the crest, above the helm (also in silver), a *Linnaea borealis* is depicted. The flower stalk displays two flowers; its creepers hang down on both sides, each one supporting a small insect, namely 'Linnaella'. The black part of the shield holds the motto: *Famam extendere factis*—'We extend our fame by our deeds.'

However, the national herald Daniel Tilas (1712–72) rejected this first design, despite Linnaeus's pleas to keep it as it was.

The Linnaean materials hold two further sketches of Linnaeus's coat-of-arms; one from 1763—a painting on vellum with Linnaeus's coat of arms undertaken by a 'C.E.H.', with a eulogy, found in volume one of the 12th edition of *Systema naturae* (1766). The second colour sketch is painted directly into the second volume of *Systema naturae*, 12th edition (1767).



LEFT Linnaeus' first draft of his coat of arms © The Linnean Society of London

#### **FORTHCOMING EVENTS 2014**

1 Oct

Lunchtime Lecture 12.30–13.00

Darwin's Bards: British and American Poetry in the Age of Evolution

Speaker: *Dr John Robert Holmes* (University of Reading) No registration required

2 Oct

Evening Lecture 18.00–19.00

**Darwin Lecture 2014: Darwin Diagnosed** 

Speaker: **Professor Anthony K Campbell** (Cardiff University) No registration required

22-24 Oct

Three-day Meeting
Times TBC

**New Perspectives on Climbing Plants** 

Taking place at Royal Botanic Gardens, Kew and the Linnean Society of London

Registration essential www.linnean.org/climbingplants

5 Nov

Lunchtime Lecture 12.30-13.00 Forensic Entomology

Speaker: **Dr Martin Hall** (Natural History Museum, London) Visit www.linnean.org/events for more details

10-11 Nov

Two-day Meeting
Times TBC

**Radiation and Extinction:** 

Investigating Clade Dynamics in Deep Time

Organisers: *Anjali Goswami* (University College London), *Phil Mannion* 

Taking place at the Linnean Society of London and Imperial

College, London
Registration essential www.linnean.org/radex

20 Nov

Evening Lecture 17.30–19.00

Land Sparing vs. Land Sharing:

Tackling the Greatest Environmental Challenge of the 21st Century

The Rachel Carson Memorial Debate in association with LERN Chair: *Georgina Mace* (Director of the Centre for Biodiversity and Environment Research)

and Environment Researc No registration required

2 Dec

Evening Lecture 17.30–19.00 Founder's Day Lecture 2014

Models and Metaphors, Orchids and Primroses When, Why and How is a Person like a Plant?

Speaker: **Dr Jim Endersby** (University of Sussex)

No registration required

3 Dec

Lunchtime Lecture 12.30–13.00

Blaschka-Glass Creatures of the Ocean

Speakers: *Miss Miranda Lowe* (Natural History Museum, London) and *Mr Stephen Ramsey* (Imperial College, London) No registration required

Please check our website for other events not listed here



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- please submit news,
reviews, events and
articles in MS Word
format to the Editor at
pulseeditor@linnean.
org. Accompanying
images must be a high
resolution JPEG or
TIFF with appropriate
permission and
copyright.

### **Dr Michael Dixon** of the NHM Knighted

The Linnean Society would like to offer congratulations to Dr Michael Dixon, Director of the Natural History Museum, London (NHM) on receiving a Knighthood in the Queen's Birthday Honours List in June. Dr Dixon originally studied Zoology at Imperial College, London and eventually went on to become Director General of the Zoological Society of London (ZSL). His direction of the NHM has resulted in the institution's current high visitor numbers—an annual attendance approaching five and a half million. His tenure has also seen the successful implementation of the Darwin Centre, where the public are brought closer to actual scientific research. Having led the Museum for the past ten years, Dr Dixon has been knighted and recognised for 'services to museums'.



© NHM, Lo

#### **Lunchtime Lectures**

As of mid-2014, the Society has put together a new series of lunchtime lectures. Held at our premises at Burlington House, the lectures are open to all. The line-up looks set to be both varied and fascinating, with talks by Dr John Robert Holmes, Dr Martin Hall, and Miss Miranda Lowe and Mr Stephen Ramsey. Taking in an array of topics, the talks will look at poetry and nature: how advances in science have changed the way poets deal with nature and what can poetry tell us about human understanding of planet earth; forensic entomology: where insects, so ubiquitous in nature, can take us from a crime scene to a court room via analysis in the laboratory; and Blaschka's marine invertebrates: how these stunning glass sculptures, made in the 1800s by Leopold and Rudolf Blaschka, were once very important to scientific study, but are increasingly being regarded as works of art. For more about the Lunchtime Lectures and other events visit www.linnean.org/events



LEFT Leopold Blaschka 'at work' in the Natural History Museum of Geneva Wikimedia Commons/ Eveha via Totodu74